REMARKS

By this amendment, claims 1, 3, 4, 6 and 9 have been amended, claims 7 and 8 have been cancelled, and claims 11-18 have been added. Accordingly, claims 1-6 and 9-12 are currently pending in the application, of which claims 1, 9, 12, 13 and 14 are independent claims. The specification has been amended to correct certain informalities. Figure 1 has been amended to label the x-axis "dielectric constant" as identified in on page 2 of the specification.

In view of the above amendments and the following Remarks, Applicants respectfully request reconsideration and timely withdrawal of the pending objections and rejections for the reasons discussed below.

Specification Objection

In the Office Action, the specification at page 3, line 1 was objected to as because status of the referenced patent application needed to be updated.

The specification has been amended to reflect the status of the referenced application.

Accordingly, Applicants respectfully request withdrawal of the objection to the specification.

Rejections Under 35 U.S.C. §102/§103

Claims 1-6 and 9-10 stand rejected under 35 U.S.C. §102(b) as being anticipated by U. S. Patent No. 5,888,469 issued to Stiller, *et al.* ("Stiller") or in the alternative, under 35 U.S.C.§103(a) as obvious over Stiller. Applicants respectfully traverse this rejection for at least the following reasons.

In the Office Action, the Examiner takes the position that Stiller teaches a carbon foam material being a porous, isotropic product that has a density ranging from 0.2 to 0.4 g/cc. The Examiner further contends that Stiller appears to use the same starting material bituminous coals that have been comminuted to an appropriate particle size of about -60 to -80 mesh to form carbon foam. It is the Examiner's position that the particulate coal would not have possessed a free swell index outside the claimed range and that products of identical chemical composition cannot have mutually exclusive properties. The Examiner further indicates that Stiller is silent as to a dielectric constant and an electrical resistivity of the carbon foam. The Examiner indicates that Stiller appears to use the same starting material in the same process, to form a carbonized foam having the density within the claimed range. The Examiner reasons that the dielectric constant and electrical resistivity of the carbon foam would be inherently present. Applicant respectfully disagrees.

The present invention is directed to carbon foam materials possessing properties that exhibit stealth or radar absorptive characteristics. Stiller is directed to a method of making anisotropic carbon foam. The method of Stiller includes de-ashing and hydrogenating bituminous coal. The hydrogenated coal is then dissolved in a solvent which facilitates the de-ashing of the coal. The asphaltene portion of the coal is separated from the oil constituents. The asphaltene extracted portion is then heated to remove the solvent followed by heating to form the carbon foam. See Col. 2, lines 45-63.

As illustrated by the brief summary of the Stiller above, Stiller teaches making a particular carbon foam from a specialized extraction of coal. The asphaltene extracted portion used by Stiller to form carbon foam is different than the materials identified in the present application for forming carbon foam. Stiller is using different materials and methodologies to

form a particular species of carbon foam. This distinction is relevant because the Examiner has taken the position that the claimed properties of the invention are inherent in Stiller. This reasoning holds true only if Stiller is using the same starting materials and methodologies to form the resulting carbon foam. As discussed above, this is not the case. Accordingly, the claimed properties of the dielectric constant and the electrical resistivity are not taught or inherent from the teachings of Stiller.

Accordingly, Stiller fails to disclose, teach or suggest a radar emission absorbing material comprising a carbon foam having a dielectric constant from about 2 to about 6 and an electrical resistivity ranging from about $1x10^{0}$ ohm-cm to about $1x10^{+6}$ ohm-cm as required by Applicant's claim 1.

Further, Stiller fails to disclose, teach or suggest a radar emission absorbing material comprising a carbon foam manufactured by a process comprising heating particulate coal in a pressurized, non-oxidizing atmosphere, having a pressure ranging from about 50 psi to about 500 psi, to a temperature ranging from about 300°C to about 600°C to form green foam, carbonizing the green foam to form a carbonized foam by heating to a temperature above about 600°C until the carbonized foam exhibits a dielectric constant from about 2 to about 6 and electrical resistivity ranging from about $1x10^{0}$ ohm-cm to about $1x10^{+6}$ ohm-cm as required by claim 9. As discussed above, Stiller's disclosed methodology is quite different from the process claim in Applicant's claim 9.

Accordingly, Applicants respectfully request withdrawal of the 35 U.S.C. §102(b)/§103(a) rejection of claims 1-6 and 9-10. Since none of the other prior art of record discloses or suggests all the features of the claimed invention, Applicants respectfully submit that

independent claims 1, 9, and new claims 12, 13 and 14, and all the claims that depend therefrom are allowable.

Double Patenting Rejection

Claims 1-6 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-12 of co-pending Application No. 09/976,172. The Examiner asserts that while the conflicting claims are not identical, they are not patently distinct from each other because claims 1-12 of co-pending Application No. 09/976,172 reads on the claim subject matter except a dielectric constant electrical resistivity of carbon foam. The Examiner reasons since co-pending Application No. 09/976,172 appears to use the same starting material and the same process to produce the identical carbon foam as the present invention, then the dielectric constant and the electrical resistivity would be inherently present. Applicants traverse this rejection for the following reasons:

Claims 1-6 of the present application are directed to carbon foam having certain electrical resistivity and dielectric constant properties. Claims 1-12 of pending Application No. 09/976,172 are directed to activated carbon foam that has been treated to provide an increased surface area. Since the two applications are directed to different inventions i.e., activated carbon foam in one case and carbon foam having radar absorbing properties in the other case, Applicants respectfully request withdrawal of the provisional obviousness-type double patenting rejection.

CONCLUSION

Applicants believe that a full and complete response has been made to the pending Office Action and respectfully submit that all of the stated objections and grounds for rejection have been overcome or rendered moot. Accordingly, Applicants respectfully submit that all pending claims are allowable and that the application is in condition for allowance.

Should the Examiner feel that there are any issues outstanding after consideration of this response; the Examiner is invited to contact the Applicant's undersigned representative at the number below to expedite prosecution.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,

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